Application No.: 10/721,016 Docket No.: DAMADIAN 3.0-080

## IN THE CLAIMS

 (currently amended) A method for magnetic resonance imaging comprising:

receiving a patient for magnetic resonance imaging at a facility, the facility having a first magnetic resonance imaging scanner and second magnetic resonance imaging scanner, the first scanner being large enough to allow at least the torso—a whole body of a patient to be scanned and the second scanner being sized to allow only an extremity or the head of a patient to be scanned; and

inputting at a computing station information identifying a scan to be performed for the patient or a condition to be considered in planning the scan;

identifying which scanner is capable of performing the scan;

processing at the computing station the information relative to the capability and availability of the first scanner and the second scanner to determine which scanner may perform the scan most efficiently; and

selectively directing said received patient to the first magnetic resonance scanner or to the second magnetic resonance scanner based on an anatomy of the patient to be imaged and the sizes of the scanners—the processed information;

wherein the first magnetic resonance scanner and the second magnetic resonance scanner are independently operable; and

wherein selectively directing comprises executing on a processor, maintaining a list of said received patients in a queue, accessing said maintained list, and processing said list so as a selectively direct said received patients to either the first or second magnetic resonance scanner.

2. (original) The method of claim 1 further comprising selectively directing subsequently received patients

to the first magnetic resonance scanner or to the second magnetic resonance scanner.

3. (original) The method of claim 1 further comprising:

receiving another patient at the facility; and simultaneously scanning said received patient in the first magnetic resonance scanner and said another received patient in the second magnetic resonance scanner.

4. (original) The method of claim 1 further comprising:

receiving another patient at the facility; and simultaneously scanning said received patient in the second magnetic resonance scanner and said another received patient in the first magnetic resonance scanner.

5. (original) The method of claim 1 further comprising:

orienting said received patient such that said received patient is in a recumbent position;

placing said received patient's head in the second scanner; and

scanning said received patient's head.

- 6. (original) The method of claim 1 further comprising scanning said received patient's foot with the second scanner as said received patient is oriented in a weight bearing position in the second scanner.
  - 7. (canceled)
- 8. (currently amended) A method for magnetic resonance imaging comprising:

selecting a first patient to be scanned at a facility—based on an anatomy of the first patient to be scanned, the facility having a first magnetic resonance imaging scanner and second magnetic resonance imaging scanner, the first scanner being large enough to allow at least the

torsoa whole body of a patient to be scanned and the second scanner being sized to allow only an extremity or the head of a patient to be scanned;

selecting a second patient to be scanned at the facility; and

inputting at a computing station information identifying scans to be performed for the first patient and the second patient or a condition to be considered in planning the scans of the first patient and the second patient;

identifying which scanner is capable of performing the scans;

processing at the computing station the information relative to the capability and availability of the first scanner and the second scanner to determine which scanner may perform the scan most efficiently;

scanning said first patient using the first imaging scanner;

selecting a second patient to be scanned at the facility based on an anatomy of the second patient to be scanned; and

scanning the extremity or head of said second patient using the second scanner;

wherein the first imaging scanner and the second imaging scanner are independently operable. - and

wherein the steps of selecting a first patient and selecting a second patient comprise executing on a processor, maintaining a list of patients in a queue, accessing said maintained list, and processing said list so as to selectively direct said received patients to either the first or second magnetic resonance scanner.

9. (original) The method of claim 8 further comprising performing scanning substantially simultaneously.

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10. (currently amended) A facility for performing magnetic resonance imaging, comprising:

first magnetic resonance imaging apparatus capable of producing an image of a patient's torso;

an extremity scanner a second magnetic resonance imaging apparatus adapted to produce an image of a patient's extremity or head; and

a processor maintaining a list of received patients in a queue for selectively directing received patients to either the first magnetic resonance imaging apparatus or the extremities scanner based on the anatomy of the patients to be imaged;

## a computing station for:

processing input information identifying a scan to be performed for the patient or a condition to be considered in planning the scan;

identifying which scanner is capable of performing the scan;

processing at the computing station the input information relative to the capability and availability of the first scanner and the second scanner to determine which scanner may perform the scan most efficiently; and

selectively directing the first and second patients to the first or second magnetic resonance imaging apparatus based on the processed information;

wherein the first magnetic resonance apparatus and the extremities scanner is are independently operable.

The facility of claim 10, wherein 11. (original) said first magnetic imaging apparatus further comprises a first magnet defining a substantially horizontal first field axis and a first imaging volume surrounding said first field axis, said first imaging volume having a vertical dimension in a direction

transverse to the direction of said first field axis and a horizontal dimension in a direction parallel to the direction of said first field axis.

- 12. (original) The facility of claim 11, wherein said first magnetic imaging apparatus further comprises a patient support capable of supporting a patient with the long axis of the patient's torso in a substantially vertical orientation and moving the patient upwardly and downwardly so as to align a region of the patient's torso with the first imaging volume.
- 13. (original) The facility of claim 12, wherein said patient support is capable of supporting a patient in a weight bearing position.
- 14. (original) The facility of claim 12, wherein said patient support is capable of supporting a patient in a sitting position.
- 15. (original) The facility of claim 10, wherein said second magnetic imaging apparatus includes a second magnet defining a substantially second horizontal field axis and a second imaging volume surrounding said second field axis, said second imaging volume having a vertical dimension in a direction transverse to the direction of said second field axis and a horizontal dimension in a direction parallel to the direction of said second field axis.
- 16. (original) The facility of claim 14, wherein said second magnetic imaging apparatus includes a patient support capable of positioning a patient's extremity or head within the second imaging volume.
  - 17. 19. (canceled)
- 20. (currently amended) A combination for performing magnetic resonance imaging scanning, comprising:

an extremity scanner having a patient receiving space large enough to accommodate only an extremity or head of a patient;

a torso scanner having a magnet defining a substantially horizontal field axis and an imaging volume surrounding said field axis, a patient support capable of supporting a human patient with the long axis of the patient's torso in a substantially vertical orientation and means for moving said patient support about said imaging volume such that a scan of the patient's torso can be obtained; and

a processor maintaining a list of received patients in a queue for selectively directing received patients to either the extremity scanner or the torso scanner based on the imaging needs of the patient;

## a computing station for:

processing input information identifying a scan to be performed for the patient or a condition to be considered in planning the scan;

identifying which scanner is capable of
performing the scan;

processing at the computing station the input information relative to the capability and availability of the first scanner and the second scanner to determine which scanner may perform the scan most efficiently; and

selectively directing the first and second patients to the first or second magnetic resonance imaging apparatus based on the processed information;

wherein the extremities scanner and the torso scanner are independently operable.